

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: n4so@juno.com (CHARLES K BROWN)  
Subject: [4190] BD.EXE  
Message-ID: <19960913.235727.2959.0.n4so@juno.com>

#### BEARING AND DISTANCE CALCULATOR

The distance calculator BD.EXE is available on the ARRL computer BBS.  
For QRP contacts, it will tell you exactly the distance from your location to the QRP location to 3 decimal points-- for example 600.999 miles.  
Also, it is flexible enough to give you a variety of information such as:

1. calculations from your QTH to any grid square.
2. calculations from your QTH to any lat./longitude.
3. calculations between any 2 grid squares.
4. calculations between any 2 lat./long. points.
5. convert grid squares to lat./longitude.
6. convert lat./longitude to grid square.

It "memorizes" your stored QTH and is an efficient and highly accurate calculator compensating for the earth's shape.

Michael Owen W9IP and Paul Wade N1BWT

Free from the ARRL Hiram BBS  
860-594-0306  
=====  
Ken Brown  
QTH Near Mobile, AL  
QRP-L #622  
n4so@juno.com

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: adams@chuck.dallas.sgi.com (chuck adams)  
Subject: [4193] Beam Restoration  
Message-ID: <199609141406.0AA24827@chuck.dallas.sgi.com>

Gang,

I'm taking suggestions before I do this, 'cuz (that's a notation for the TX way of saying it and an abbreviation for because :-) ;-)) I know that education is expensive no matter how you get it.

I have and have had in my possession one Telex hy-gain  
Model TH2MK3, 2-element, 10/15/20 meter, trap beam for some  
time.

#### Secifications

Forward gain ..... 5.5 dB  
Front-to-back .....15-20 dB  
Maximum power input .. 1kw AM (not a worry at this station)  
VSWR (at resonance) .. 1.2:1

Boom Length ..... 1.8m  
Boom Diameter..... 5.08cm  
Longest Element ..... 8.32m  
Maximum Wind ..... 128kmph (80mph) That is a worry. :-)

Gain is not given a reference so I'll assume Isotropic.

Here is where I need suggestions. I am going to completely,  
and I mean completely disassemble and clean as much as possible.  
This beam has literally been around the world on a cargo ship  
and used by AA5DX on many an island and from many DX locations.

So, will using a plastic scrub brush and scowering pad with  
Aluminum pot household cleaner be sufficient? I don't want to  
harm the environment or my delicate hands used for electronic  
assembly work. I do plan to keep chemicals out of the traps.  
Just blow them out to remove any critters that have taken up  
and made a home in them.

I was going to do this last week before I got hauled off to MD  
for a critical situation and use this beam with the NORTEX group  
for QTTF next weekend, but alas it is not to be, but I have a few  
daylight hours in which to get this done if it is possible.  
Otherwise we will go with the usual dipoles and long wires. This  
was to be our 'big hammer' to swat the big guys on the East Coast.  
:-)

Also, at 20' I'd guess this is a better solution, although not  
the ideal operating position for such a beam, than say a dipole  
or some long wires. Those more experienced in this area might  
wanna let me know what your experiences are in say a field-day  
operating environment.

dit dit es tn timer

Chuck Adams (K5FO CP-60) 49/49/50 adams@sgi.com

EMPS Qs=0 STATES=0 DX=0

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: David Adams <dave@flowserver.stem.com>  
Subject: [4212] Cascade goings on  
Message-ID: <9609150020.AA04334@flowserver.stem.com>

Greetings! Well, I got home from Foothill (interesting experience in that I have never "had a table" before. Didn't sell the 520, but Doug and Jim were set up at the next table over and that kept it interesting), and couldn't nap so I through my wife and child out of the house (okay they went to one of my daughter's friend's birthday party) and pulled out the Cascade. I needed fumes in my life!

I finished section 4 (after having soldered in a socket for U8 and then realizing it was not an appropriate socket (pins didn't fit)). Pulled out the p.s. and turned it on...touched the wiper of r27 and...no hum...I'm supposed to hear a hum....panic....look closely at the board....realize I haven't defluxed the sucker...scrape the flux off of part of the pad...touch the wiper pin....WE'VE GOT HUM!!!!!!!!!!!!!!!!!!!!!!

Ah...I feel much better....

73 de dave, n9uxu

PS - Had a great time at the Jim Cates Pizza fest last night...you have GOT to see Doug's new antenna!

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: Marshall Emm <75230.1405@CompuServe.COM>  
Subject: [4203] Dr. Grammar  
Message-ID: <960914173919\_75230.1405\_HHB41-2@CompuServe.COM>

Dear Dr. Grammar,

After reading your question, I have to wonder just where you got your doctorate!  
[g]

--So please tell me why the plural of "mod" should be "mod's" and not "mods".--

People so often can't remember that in addition to indicating a possessive form, the apostrophe is also used as an indicator of abbreviation or contraction. "Cannot" contracted to "can't" is a pretty good example. Thus "mod's" does not

refer to something belonging to mod, but is an abbreviation of modifications. That's why it's also perfectly correct to pluralize acronyms with an apostrophe. The plural of IBM PC is quite legitimately IBM PC's. I personally would NEVER stoop to using Q-signals on phones or in writing, but if I did I would pluralize QSO as QSO's.

Quite often, especially in industry jargon, an abbreviation or acronym becomes a noun in its own right and so "mods" and "mod's" are equivalent. Usually the context makes the meaning obvious, but you can always fall back on the rule: "When in doubt, spell it out."

Now, what does this have to do with QRP? Absolutely nothing, and this message is provided solely as an illustration of the sort of traffic that is inappropriate for this List.

73  
Marshall  
AA0XI

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: N9DD@aol.com  
Subject: [4195] EMPS?  
Message-ID: <960914104200\_478567654@emout17.mail.aol.com>

Tagged to the end of a recent K5FO message dated 96-09-14 10:08:14 EDT:

<< Chuck Adams (K5FO CP-60) 49/49/50 adams@sgi.com  
EMPS Qs=0 STATES=0 DX=0 >>

EMPS?? Hmmmm.... TMPS = Thirty Meter Propagation Study, so...  
EMPS = Eleven Meter Propagation Study??? No, Chuck! Don't do it!!!!!!  
Hopefully, EMPS = Eighty Meter Propagation Study. :-) Just curious.

Tom N9DD  
South Bend, IN

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: Joel Malman <malman@BBN.COM>  
Subject: [4188] Gel Cell FAQ ?  
Message-ID: <199609140525.BAA56394@nss2.CC.Lehigh.EDU>

Group,

I am now the new owner of a used 12 volt, 7 Amp-Hr Gel Cell. Right now it seems to be fully charged and easily runs my whole qrp station, no problem. (At 7 AHr's it would probably run a modest QRO station for a while hi, hi).

Anyway, the battery did not come with any instructions for recharging and I don't recall seeing any Gel Cell recharging FAQ.

Question: How different is NI-CAD battery recharging from Gel Cell recharging? I always thought they were about the same.

Anyway, I think I remember the one-tenth rule - so I suspect a 1 amp trickle charger for about 10-15 hours would do just fine for a 7 AHr Gel Cell, at room temp.

Getting a 1A trickle charger is no problem... Even K-Mart has a \$12-15 trickle charger (they don't say they work with Gel Cells, but I suspect a trickle charger is a trickle charger for a Gel Cell or a Lead Acid battery).

The only problem with the cheap K-Mart (etc) chargers would seem to be that they have no visual (i.e. LED) way of telling if the battery is fully charged.

My guess is that this is not really a problem, given that you,

- a. pretty much use up a good part of the capacity of the battery ( >50% )
- b. You charge the battery for a reasonable amount of time (about 10-15 hours) at normal room temp.

Has anyone tried to use these low cost chargers? Did they work OK?

Is there any advantage to getting a charger with "Full Charge" LED's? My guess is that the LED's will only give you a warm, happy (fully charged :hi) feeling. But other than that, LED's are useless.

-----

OB-QRP:

- a. Looking foward to the Fox hunt this year!
- b. Going to have some QRP fun this weekend with the ARRL VHF Contest.

-----

72,3

/joel wa1qvm (QRP-1 337)

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: Jason Nathaniel Artz <jartz@umich.edu>  
Subject: [4200] How do I set this to DIGEST mode?  
Message-ID: <Pine.SOL.3.95.960914122153.7079C-100000@seawolf.rs.itd.umich.edu>

I'm sorry to send this to the list and waste bandwidth. I deleted the instructions for this listserver and I forgot how to set it to digest mode, as opposed to sending me each message seperately. Could someone tell me how to do this? Please reply via direct e-mail as not to make this into a thread.

73 de Jason, AC6XA

=====

Jason Artz	University of Michigan, Ann Arbor	No,
e-mail: jartz@umich.edu	School of Music	I'm not
Amateur Radio: AC6XA	o/~	a gnome
Friend in Good Standing of Michael H. Chu - Braindead Club affiliate		

=====

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: Dan Keen <70731.722@compuserve.com>  
Subject: [4187] Japanese Sailor  
Message-ID: <960914045002\_70731.722\_EHM90-2@CompuServe.COM>

wk9t@juno.com wrote

> 14 Year Old Japanese Sailor has Not Been Heard From Since 18 August I have  
> been trying to make contact with Subaru since August 18, 1996.  
> Unfortunately, no one has made contact with him since 18 August 1996. He  
> may have equipment problems with his transceiver or its antenna.

Less then 5 minutes ago that I write this, the first message over the Radio Shack Newsguide device came the AP NEWSWIRE message that Subaru was spotted successfully passing under the Golden Gate Bridge. Great news!

Just in case everyone hasn't heard yet that he is safe now.

Dan  
70731.722@compuserve.com

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: Bob Hightower <ki7mn@dancris.com>  
Subject: [4197] Mail, etc.  
Message-ID: <199609141550.IAA18963@dancris.com>

Clayton recently posted a note about the 'clutter' on the list, and I have noticed that there are those who, unwittingly I'm sure, continually send copies of a reply to a private note to the list, probably by not turning off some feature on their mailer program.

So, the short of it is, if it is a private note, please don't copy the list unless it is something of general interest or just so hilarious that it has to be shared. Maybe we can keep the list cops happy :^).  
73,

Bob, ki7mn@dancris.com  
NorCal #1228, ARCI #8918, Qrp-1 #271, CQC 274

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: adams@chuck.dallas.sgi.com (chuck adams)  
Subject: [4196] NYC Oct 9 Meeting  
Message-ID: <199609141459.0AA25080@chuck.dallas.sgi.com>

Gang,

Preston Douglas, WJ2V, in New York is coordinating a meeting in The Village for the night of October 9th.

Father Bruce Bowes and others are planning on being there. I'll be there as I will be in The Big Apple that week and in The Village.

So if you are interested, let Preston PDouglas12@aol.com know via email and he'll find us a place for the number that will show up. Looking forward to it myself and the meal will not be expensive (he will shoot for around \$10 or so per head) and he is leaning towards paella, a mexican dish I believe.

Wonder if I can get WAS as I have personally been in 48 states. Would have had ND and SD in Oct if the meeting hadn't been changed from Eagen MN to NYC NY.

OK, back to your regularly scheduled broadcast in progress.

dit dit

Chuck Adams (K5FO CP-60) 49/49/50 adams@sgi.com  
EMPS Qs=0 STATES=0 DX=0

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: PDouglas12@aol.com  
Subject: [4194] Pacificon Badge List  
Message-ID: <960914102717\_284740632@emout13.mail.aol.com>

Gents/ladies:

This is the latest list of Pacificon Badges. They are still available and free for those who are attending Pacificon. Delivery by Doug Hendricks on site only. Email me your request. I will post updated lists only about 1x week to keep the bandwidth down for the rest of us (including me :-( ) who can't attend.

72,

Preston WJ2V

List follows:

ADAMS	CHUCK	K5FO
ADAMS	DAVID	N9UXU
ANDERSON	JEFF	WA6AHL
ANDREWS	JOHN	N5INZ/6
ARMSTRONG	TED	KA6LCL
BURDICK	WAYNE	N6KR
BURKE	ED	KI7KW
CATES	JIM	WA6GER
CLEVELAND	GROVER	WT6P
DUNDAS	JOHN	AB6DG
GIPE	MICHAEL	K1MG
GOLDSTEIN	STAN	N6ULU
GRUDIN	JEFF	AC6KW
HARDEN	PAUL	NA5N
HARTFORD	CAM	N6GA
HENDRICKS	DOUG	KI6DS
JONES	DARREL	WD6BOR
PARKER	JERRY	WA6OWR
PEASE	ROGER	KE6PPI
PHILBIN	D.K.	OZ2DKP
POLIZZO	PHIL	AC6LS
QUADROS	JOHN	KB6DLN



SAMMUT CHARLES K8MI  
SLAVENS DICK WA6TMF  
SPITTLE DERRY VE7QK  
STANFORD LEE KM6LA  
STARK RON KU7Y  
SWARTZ ERIC WA6HHQ  
TELLEFSEN BOB N6WG  
WOOD MIKE N6MVE  
WOOD MIKE N6VME  
YARNES DAVID W7AQK

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: Dale LeDoux <dledoux@laci.net>  
Subject: [4186] permeability-tuned oscillators  
Message-ID: <1.5.4.16.19960913221433.2bb75592@laci.net>

Brian.Buydens@usask.ca wrote:

>  
> I was in the process of reading "Solid state design for the Radio Amateur"  
> by Hayward and Demaw and I notice that many of their designs use  
> air-variable capacitors. Thinking that these tend to be expensive, and  
> hard to come by in junked equipment because of the demise of tubes, I got  
> curious enough to open up an automobile radio I have to see what it used  
> for tuning. It had several coils with movable slugs which were engineered  
> to move as a unit.  
>  
> Is this typical for car radios? Is it a viable way to go for ham radio  
> equipment? Is the purpose of roughly 5 variable coils for tuning various  
> stages of the superhet or are they used for different parts of the  
> broadcast band? (The receiver is AM/FM.) Is it feasible to convert a  
> broadcast band radio for shortwave use on HF?  
>  
> Thanks for your help.  
>  
> Brian.

Brian--

In order vary the frequency of an oscillator, one portion or the other of the tuned circuit must be adjustable. Varying the permeability of the core of an inductor while balancing it against a fixed capacitor works as well as varying the capacitance against a fixed inductance. I think Collins military receivers used this scheme also.

Probably the biggest hurdle to success in homebrew implementation of this scheme would be making sure that the sliding slug was mechanically stable,

otherwise your oscillatoir would change frequency with anything which influenced the physical location of the slug within the inductor.

As for using BC radios for amateur band reception, any OLD homebrew book will have several plans to do this. However, the BC receiver is NOT selective and lacks a BFO to receive CW or SSB. By the time you brew up a converter AND a BFO and stick them into your circuit, then add an audio filter to reduce QRM, you could have bought and built a selection of kits.

72,  
Dale

Dale LeDoux  
Bath Electrical Systems  
Power Specialists -- 480 V to 230 KV  
KD5QI

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: Doug Cooper <dougco@efn.org>  
Subject: [4213] radial schooling  
Message-ID: <Pine.SUN.3.91.960914203747.8449A-100000@garcia.efn.org>

TNX,

Thanks to all who responded to my radial question. This is the best advice: from someone who's been there, done that. tnx agn.

73 de n7cnh/doug

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: rohrwerk@pconline.com (John Seboldt)  
Subject: [4199] small amplifiers  
Message-ID: <v01530502ae6097aeacd9@[206.145.48.104]>

Ernie, AA1IK, is asking about small (ha) amplifiers for non-qrp use... The CCI AN779 kit is the one I have started to build up, using a push-pull pair of MRF454's for 140W output. The module is built and on a giant heat sink (space for another, maybe for VHF, in the same box), and has been tested and works fine into a dummy load. I have yet to build up filters, band

switching, TR switching, etc. It needs about 2-5 watts drive, -- I have an "OK" push-pull driver already, but wonder if somebody can recommend a nice clean Class AB or Class A driver with lots of reserve.

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: kd7s@psnw.com (Bill Jones)  
Subject: [4189] Tell me more about SW-30 modifications  
Message-ID: <199609140543.WAA23465@sierra.psnw.com>

How timely it was to see Bill Acito's reflections on the SW-30 transceiver. I just ordered some parts for an SW-40 a couple days ago and would enjoy hearing from anyone with advice to share. I am building from scratch on the FAR Circuits board (thanks to the generosity of Steven Ciciora.) I \*have\* read the article, "Revisiting the 40-40" from the ARRL's new book, QRP POWER.

=====  
Bill Jones - KD7S <><  
Sanger, California  
Reply to kd7s@psnw.com  
=====

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: "Frank G3YCC" <g3ycc@enterprise.net>  
Subject: [4204] Wanted QRP++, used  
Message-ID: <199609141854.TAA18661@mail.enterprise.net>

Anyone got a used QRP++? Can arrange transport to UK.

--  
Frank G3YCC  
Ham Radio QRP Web Page:  
<http://homepages.enterprise.net/g3ycc/>

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: "Frank G3YCC" <g3ycc@enterprise.net>  
Subject: [4205] Web site  
Message-ID: <199609141854.TAA18667@mail.enterprise.net>

I asked before and lost the info. I need more web space for my site as it is FULL and have info waiting, like nice pictures from JA land of home

made keys. Have applied to Geocities, no reply, yet. Any other ideas?  
Thanks

--

Frank G3YCC  
Ham Radio QRP Web Page:  
<http://homepages.enterprise.net/g3ycc/>

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: KB0PJE /5 <jdougher@wt.net>  
Subject: [4210] Whiterook Key & Paddles  
Message-ID: <323B7AAE.7B6@wt.net>

Thanks for posting info on these. I sent check on Monday and they arrived today (Saturday). I ordered both the iambic and straight keys. Both are well-built, good feel, small, and a real bargain at the price.

I especially like the 3.5 mm connector for the cable; I'm thinking of adding similar setup to my "QRO paddles". And the box size echoes just the right "click" for rigs without sidetone.....

"usual disclaimer"  
KB0PJE /5  
Jack /Houston

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: Vic Simpson <vsimpson@boco.demon.co.uk>  
Subject: [4201] ZS6BKW multiband antenna - anyone built one? (long)  
Message-ID: <9be8H0AGDp0yEw2P@boco.demon.co.uk>

ZS6BKW came up with a variation on the G5RV some years ago. He found a combo of top and matching section maximising the number of bands on which it would match to 50 ohm coax cable.

The top came out at 27.9m and the open wire section at (13.6m x vel. factor). The matching section is 400 ohms (critical).

Results (Attribution uncertain, maybe RadCom : ZS6BKW author)

MHz	SWR ratio (:1)
3.65	11.8
7	1.9
10	88
14	1.3
18	1.6
21.2	67

24        1.9  
29        1.8

Five bands with  $swr < 2$ : not bad. So how come I have not found anyone using this design? I guess constructing 400ohm line presents the problem. To reduce visual impact at my town station I use light, tapering glassfibre masts with minimal guying: The G5 top is insulated multistrand and the matching section is 300 ohm slotted ribbon.

It works fine but that top could never support the weight of traditional 16swg open wire feeder. So does anyone out there have a technique for developing open wire lines to a specific impedance using multistranded? I do not believe the standard formulae will apply in this case.

A technique permitting most work and testing to be done at ground level would be welcome; I became less nimble following an accident.

I posted a query on this a couple of weeks ago in rec.radio.amateur.antenna and drew not a single response. I wonder if the QRP-L can help? I can't imagine qrpers using home brew feeder for casual use in the field but the antenna may have an application at home stations where space is a little limited or where better multiband matching performance is a requirement.

Enjoy the weekend.

73 de G0BVZ, Vic

RSGB G-QRP AGCW ARCI(When I remember to renew!) SCAG DIG QRP-L #666

From owner-qrp-l@Lehigh.EDU Sat Sep 14 23:13:17 1996

From: Stan Goldstein <stan@cruzio.com>

Subject: [4202] Re: Beam Restoration

Message-ID: <323AEB32.2D61@cruzio.com>

chuck adams wrote:

>

> Gang,

>

> I have and have had in my possession one Telex hy-gain

> Model TH2MK3, 2-element, 10/15/20 meter, trap beam for some  
> time.

>

> Secifications

>

> Forward gain ..... 5.5 dB

> Front-to-back .....15-20 dB

> Maximum power input .. 1kw AM (not a worry at this station)

> VSWR (at resonance) .. 1.2:1  
>> Gain is not given a reference so I'll assume Isotropic.

Nice lil beam. I've heard and seen that telex makes some good rugged stuff.

1 kw out ? since you usually only use < 1 watt, I would make sure that the minimum power needed to drive the beam is that low, when you calculate wire loss and add in the multi-element losses, you may not be running enough power to properly drive the beam to realize its potential over a dipole.

> So, will using a plastic scrub brush and scowering pad with  
> Aluminum pot household cleaner be sufficient? I don't want to  
> harm the environment or my delicate hands used for electronic  
> assembly work. I do plan to keep chemicals out of the traps.  
> Just blow them out to remove any critters that have taken up  
> and made a home in them.

Just do what it takes to get down to shiney metal .  
I usually use 00 or 000 steel wool.

Make sure to use conductive grease in all the joints.

> Also, at 20' I'd guess this is a better solution, although not  
> the ideal operating position for such a beam, than say a dipole  
> or some long wires. Those more experienced in this area might  
> wanna let me know what your experiences are in say a field-day  
> operating environment.  
>

I think it is a big improvement. The 5.5 db ( actually I would say it is a tad below 3 db over a dipole ) foreward gain helps some, but for your listening pleasure, the reduced qrm from the undesired directions really makes a big difference during field day or other harsh environments.

> dit dit es tnX  
>

> Chuck Adams (K5FO CP-60) 49/49/50 adams@sgi.com  
> EMPS Qs=0 STATES=0 DX=0

Stan, N6ULU

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: DYARNES@aol.com  
Subject: [4207] Re: Can't take much more of this.  
Message-ID: <960914160836\_284903969@emout10.mail.aol.com>

In a message dated 96-09-12 22:47:30 EDT, JCoote@aol.com writes:

<< and those who think it amuses others to type in their  
version of abbreviated CW, particularly by using "ES" when it is easier to  
type the word 'and' or just hit the & key if they can't spell 'and'. >>

You are absolutely correct that Grover has made an excellent observation. It is truly sad that so many of us can't spell. What is even sadder is how many of us don't care! I feel that one of the greatest deficiencies in today's "graduates" (high school and college) is their inability to communicate correctly and effectively. For many years I recruited accounting graduates on college campuses, and it was depressing to see how many very bright people had miserable communications skills.

HOWEVER, I think you badly overstate your position when you criticize the use of CW type abbreviations. I resent and reject your implication that this is an indication of an inability to spell. Lighten up! It is merely a version of shorthand used to conserve words and characters in print. We are hams, and one of the shorthand systems that MOST of us know is CW abbreviations.

Few of us took Gregg (shorthand) in school! Have you never used a "Q" signal in print (as in QRP)? This is very informal communications, NOT a term paper! I'll bet you even use some of this "shorthand" in oral communications which, to many, is considered the greater sin.

The problem is when we start using abbreviations or shorthand that nobody can figure out. If it doesn't have some kind of general usage support, we shouldn't use it. Now, anyone who has ever had a CW contact probably knows the "es" means "and". It is absolutely NOT easier to type "and" instead of "es" (3 letters vs. 2 letters). Also, "es" is easier to type than the ampersand. Both require two keystrokes, but the ampersand requires a held shift key--harder in my view. This has absolutely nothing to do with one's ability to spell. We also use "vy" for very, "xmtr" for transmitter, "rcvr" for receiver, "rpt" for report and on and on. Are you telling me that you have not used these same abbreviations in print many times?

Alas, The only conclusion I can draw as to the cause of your frustration is that YOU DON'T WORK ENOUGH CW!! (Oops, excuse me for raising my voice!)

72 es tn timer ur input.

de David W7AQK

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: "Harvey D. D. Hetland" <HDHETLAND@paccd.cc.ca.us>  
Subject: [4209] Re: Can't take much more of this.  
Message-ID: <170465B2766@manage.paccd.cc.ca.us>

On the above subject David, W7AQK, commented:

"The problem is when we start using abbreviations or shorthand that nobody can figure out. If it doesn't have some kind of general usage support, we shouldn't use it." It has been my observation on CW recently that some of the newer operators are using the familiar "BK" (sorry I cannot put a vinculum over the BK to emphasize that it is sent as one character) in a new way. It is being used for "back" as in "back to you" rather than the accepted meaning of the proword "BREAK" thus giving the transmission to the other operator. I have even had a couple of new operators use "BTU" apparently for "back to you". Wonder if that can be found in the Phillip's Code?

When I was a novice in 1960 the American Radio Relay League sent each new licensee a publication which was entitled something like, "Operating an Amateur Radio Station". It was a great little paper brochure. I read it cover to cover several times, because it gave great tips on how to operate correctly. I still have my copy. There were also articles in QST suggesting good operating techniques. Mr. Handy and George Hart wrote constructive articles on operating techniques while they were managers of the ARRL's Communications Department. Others also authored articles. I remember one that took to task the practice of using dits sent to the tune of, "Shave and a Haircut", that were being used as a CQ in the novice bands. Many will remember the series of articles by John, W6ISQ, that humorously characterized some operating styles.

It is important that the experienced operator set a good example for the new operators. Many newly licensed no-code technicians do not even know how to sign their call sign correctly. As trustee and faculty advisor of a community college club and its repeater I have found myself correcting several no-code technicians that were trying to use my call when talking to me.



David, W7AQK, also commented, "I feel that one of the greatest deficiencies in today's 'graduates' (high school and college) is their inability to communicate correctly and effectively." Dave, as a community college instructor I agree strongly. Our industry advisory committee drives this point home repeatedly. In the laboratory I often force my students to verbalize their questions to me as if they were using a telephone and could not show me their protoboard stuffed with electronic components. I require written laboratory reports, and I read every word and often fill the margins with constructive comments. I recently plowed through the records of my second year students. Over two thirds of them had taken one or more courses of ESL (English as a second language).

In California only 30% of the high school graduates qualify to go to the state college system. Of that 30% it has been found that 70% are in need of remedial instruction in mathematics and/or English. Our post secondary schools have a very difficult time dealing with this problem, especially community colleges that are required to have open enrollment policies. Those of you who work in industry can help by participating in the vocational industry advisory committees that are required by the Federal Government for community college vocational programs that receive Federal funds. Contact the Dean of Vocational Education at your community college and carry the message to the faculty. I draw heavily on the input from my advisory committee and use their recommendations continually in my curriculum changes and budget requests. You can be part of the solution!

Sorry, for the "bandwidth". It's a subject that is close to my heart. I should spend this time building another QRP rig or building a better EMPS antenna, HI.

73, Harvey, N6MM.

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: "Steve, N2MNN" <n2mnn@openix.com>  
Subject: [4191] Re: Gel Cell FAQ ?  
Message-ID: <199609141238.IAA05913@pantera.openix.com>

>I am now the new owner of a used 12 volt, 7 Amp-Hr Gel Cell.  
>Question: How different is NI-CAD battery recharging from Gel Cell  
>recharging?  
>/joel

Joel

All the info you will ever need is in "www.power-sonic.com". Go the the "sealed lead acid" page, and then the "7 AH" selection (PS-1270).

Basically for a safe 100 % charge, start with a C5 charge rate ( $1.5 \text{ A} = 7\text{AH}/\text{C5}$ ) at say a minimum battery voltage of 12.0 V. Use an LM-317 to limit the max voltage to 14.7 V. Since  $(14.7-12.0)/(1.5) = 1.8$ , you need a 1.8 Ohm ballast resistor. When the battery voltage reaches 14.5 V the battery will be almost 100% charged, so have an OP amp comparator turn off the circuit.

Some people may think the C5 charge rate is too high, but this is a taper charge, and the charge rate quickly drops.

I would choose a 2 Ohm load resistor (use 2 RS-271-131). This will give you 1.35 A  $(14.7-12.0)/2$  into the battery when it is down to 12 V. The battery is 100% charged when the current drops to 70 ma (C100) in the 14.4-14.7 range. This happens at 14.56 Volts  $(14.7 - 2 \text{ Ohm} * .070)$ . Set the comparator to turn off the charge at 14.56 V.

It may sound complicated, but it is the simplest charging scheme that I've come across that works.

For anyone who is interested I have written an article (currently being considered for publication) on building this kind of charger. I will send it to anyone on the list in Microsoft Word 6.0 format, or for 2 oz of postage (55 cents), I will snail mail a copy.

72,

Steve, N2MNN  
N2MNN@OPENIX.COM

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: k5zty@hamgate2.w5-f6cnb.ampr.org  
Subject: [4208] re: Gel Cell FAQ ??  
Message-ID: <15646@sugarland.ampr.org>

There is a good article on the requirements for charging a gel cell and the circuit for building a charger in the '95 ARRL Handbook, pg. 11.33.

A properly charged and floated gel cell battery can be expected to last in standby service for 10 years, but an error as small as 5% in the float voltage severely reduces that life.

The charger in that article is built around the Unitrode UC3906 charger chip, a pretty remarkable chip that senses current, voltage and temperature to set the float voltage.

I learned enough about gel cells from building this charger to figure out what was causing the battery in my security system to need changing every 2 years. Don't expect to change it for a long time now..

72,

Bill, K5ZTY

ARCI #8817 NORCAL #1321 CQC #178 MI #1472 NE #440 QRP-L #473  
WITHOUT CW, IT'S JUST CB

From owner-qrp-l@Lehigh.EDU Sat Sep 14 23:13:17 1996

From: Clay N4AOX <wyn@worldnet.att.net>

Subject: [4192] Re: Larry East's 49er Article in QQ

Message-ID: <323AB948.5A70@worldnet.att.net>

Doug Hendricks wrote:

> Hey, guys, that was an outstanding technical article, it took Larry and  
> others many, many hours to produce, and NO ONE SAYS THANKYOU!!!

> Now that we all have email, and Larry is on this list, take a minute to show  
> your appreciation when one of our members does something that you enjoy.

Sorry we don't measure up Doug. You know it might be that some of us don't have a 49'er, some don't have any interest in a 49'er, and maybe even a few are just sick of hearing about 49'er's. It could also be the case that many here don't subscribe to QQ. Also, I guess short attention span is a phenomena of the '90's. I think Larry is adult enough to understand that. I have thanked him personally about other things and am sure many others have also. I am thinking of the QRP Plus performance and mod. track. The things I like about W1HUE/7 is he stays strictly on the QRP subject line. He limits his posts to just the essentials, writes clearly and plainly, and usually only posts when he has something worthwhile to contribute, an example we could all hope to see more of as of late.

72,73

Clay N4AOX

From owner-qrp-l@Lehigh.EDU Sat Sep 14 23:13:17 1996

From: Mike Czuhajewski <wa8mcq@u1.abs.net>

Subject: [4206] Re Ramsey harmonics

Message-ID: <Pine.BSI.3.93.960914151811.9084C-100000@u1.abs.net>

WJ4P recently asked if anyone knows about the harmonic suppression of the Ramsey transmitter kits. Ahem.... I had an article in the April 1996 QRP Quarterly on improving suppression of the 40M kit; the sample I tested on THREE different spectrum analyzing devices came up with a second harmonic about 20 dB below the carrier, which is ten dB short of FCC requirements. The unit appeared to be properly built, all components were in the proper places, correctly marked, and actual values of the coil and caps in the pi net filter were verified and found to be correct. To keep me out of trouble with the lawyers, I merely reported on an observation of one unit, and make no blanket statements about other 40M Ramsey transmitters, nor Ramsey transmitters for other bands. However, as I said above, the thing was built properly, with proper parts in the proper places, with actual values verified on seriously expensive HP network analyzers. Make what you will of all that :-) I will not repeat what others have told me of their experiences with Ramsey transmitters, since that would be "hearsay". :-)

I added a 5 element Chebyshev low pass filter in an open area on the circuit board, and increased the second harmonic suppression to a rather stunning 51 dB below the carrier, at a very small cost in insertion loss.

73 and Queue Our Pea DE WA8MCQ

From owner-qrp-1@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: wb2vuo@juno.com (William K Hibbert)  
Subject: [4211] RE: Ramsey Harmonics  
Message-ID: <19960914.173451.7551.1.wb2vuo@juno.com>

I have to add my \$0.02 on this one...

When I decided to get more involved in QRP, I bought ALL the Ramsey QRP transmitters for a proposed QRP "TX-Box", which was going to have the individual TX's for 80 - 20 Meters, switch selectable, for convenient QRP operating...

Nice thought, BUT.....

I put the gear on a scope after I got the four TX's done, and the waveform looked "squirrely", so I took the whole mess over to a fellow VHF'er, who conveniently had a spectrum analyzer. Here's the results:

80M : F = 700 mW ; 2F = -18 dBc; 3F = -23dBc  
40M : F = 1.3 W ; 2F = -21 dBc; 3F = -30 dBc  
30M : F = 800 mW ; 2F = -13 dBc; 3F = -15 dBc

20M : F = 360 mW ; 2F = -16 dBc; 3F = -10 dBc

These are all "2 - 3 watts out..." according to the instructions...

There were spurs, both close-in (+/-10 MHz) and VHF/UHF.

I cleaned them up by using 5-pole filters from "Solid-State Design for the Radio Amateur", and got all the harmonics down to -40dBc or better. First though, I called Ramsey, and with the data in hand, asked what was up with the kits. I was told the I could "Pack up EACH TX, with \$18.00 EACH (!!!), and they would check for construction errors..." If, in THEIR opinion, the fault was my construction techniques, they would keep the money, and bill me for the repairs needed above the \$18.00 ransom...

I sold the whole mess to one of the locals that wanted a "toy" for the winter...

I would never consider another Ramsey kit, and I won't even go into their VHF FM transceivers and Amps!!

72/73, Keith, WB2VUO, QRP-L #582  
Trustee, KB2YTW/B 10 Mtr Beacon (28.2860 MHz)  
"In the Depths of the Great Bergen Swamp...FN13ac"

From owner-qrp-l@Lehigh.EDU Sat Sep 14 23:13:17 1996  
From: Bensondj@aol.com  
Subject: [4198] Re: SW-30 audio  
Message-ID: <960914121548\_101822927@emout16.mail.aol.com>

Hi Bill and company-

On Friday, Sept 13, Bill Acito <acito@asdg.ENABLE.dec.com>, wrote:

>>Subject: [4127] SW-30 Audio

>> ..... I completed a SW-30 last night. Was waiting on an order of replacement mica caps

>> from Mouser, and the box finally showed up.  
>> <snip>

>> Question on audio... seemed kinda low (when compared to a Norcal  
>> 40). Granted, 30m was 'deader than a doornail' last night, but I  
>> could still hear the loud teletype. I was comparing the sigs  
>> against my TS130.

>> Anyone who has owned both (a Norcal and a SW-xx) care to comment  
>> on audio level? RF cap peaked ok, and no, T1 is not backwards.  
>> Is this to be expected?  
>>  
>> I'm also going to examine the enclosed mod's, posted a while  
>> back. They may already have been incorporated in the version I  
>> have; I haven't checked yet. ...  
  
>> Enc:  
>>  
>>From: CRL::"Mike.Czuhajewski@bbs.abs.net" "MAIL-11 Daemon" 1-DEC-1995  
>>10:24:18.38  
>>To: Multiple recipients of list <qrp-l@lehigh.edu>  
  
>>Subj: 4040 notes and mods (repost)

When the enclosure first surfaced last December, I posted an immediate response. The pertinent highlights were twofold: 1) The original author had a problem constructing his 40-40 related to the front-end tuning circuit. I'll assert that most of the folks who own these \*do\* hear an increase in atmospheric noise when an antenna is connected. I corresponded with the original author after the post got wide circulation and never got any followup response on this topic.

2) Adding a preamplifier in front of an NE602 is not a good idea for reasons related to worsening the already-marginal input intercept inherent in using a '602. The author's suggested improvement would have helped his particular situation because he wasn't getting the proper level to the '602 in the first place.

I think I'd posted mods earlier regarding increasing the gain of the SW-30. If not, I'd be happy to put 'em up for the group. The mods suggested in the enclosure have \*not\* been incorporated in my kits for the reasons I cited above.

I read the posting a little too early this morning, evidently. I didn't notice the word 'enclosure' in the text, and wasted no time in blasting Mike for reposting the errant material a second time. My humble apologies to him followed shortly thereafter. It's my hope that the subject enclosure will die a well-deserved natural death rather than becoming our QRP-L's own chain letter! ;-)

73, Dave - NN1G